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NEWS	2	OCT 02	CA/CAPplus enhanced with pre-1907 records from Chemisches Zentralblatt
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NEWS	4	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	5	NOV 19	WPIX enhanced with XML display format
NEWS	6	NOV 30	ICSD reloaded with enhancements
NEWS	7	DEC 04	LINPADOCDB now available on STN
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NEWS	9	DEC 17	USPATOLD added to additional database clusters
NEWS	10	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	11	DEC 17	DGENE now includes more than 10 million sequences
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NEWS	14	DEC 17	CA/CAPplus enhanced with new custom IPC display formats
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NEWS	17	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	18	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	19	JAN 28	MARPAT searching enhanced
NEWS	20	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	21	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	22	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	23	FEB 08	STN Express, Version 8.3, now available
NEWS	24	FEB 20	PCI now available as a replacement to DPCI
NEWS	25	FEB 25	IFIREF reloaded with enhancements
NEWS	26	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	27	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

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=> s cashrew allergen
L1 0 CASHREW ALLERGEN

=> s major cashew nuts
L2 0 MAJOR CASHEW NUTS

=> s allergen
L3 154386 ALLERGEN

=> s l3 and cashew
L4 216 L3 AND CASHEW

=> s l4 and anacardium occidentale
L5 51 L4 AND ANACARDIUM OCCIDENTALE

=> s l5 and IgE
L6 25 L5 AND IGE

=> s l5 and IgE epitope
L7 0 L5 AND IGE EPITOPE

=> s l5 and nucleic acid sequence
L8 0 L5 AND NUCLEIC ACID SEQUENCE

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=> s l5 and pd<20021104
1 FILES SEARCHED...
4 FILES SEARCHED...
L9 11 L5 AND PD<20021104

=> d 19 1-11 cbib abs

L9 ANSWER 1 OF 11 MEDLINE on STN

2002624245. PubMed ID: 12381147. Characterization of the soluble allergenic proteins of cashew nut (*Anacardium occidentale* L.). Teuber Suzanne S; Sathe Shridhar K; Peterson W Rich; Roux Kenneth H. (Department of Internal Medicine, School of Medicine, University of California, Davis, California 95616, USA.. ssteuber@ucdavis.edu) . Journal of agricultural and food chemistry, (2002 Oct 23) Vol. 50, No. 22, pp. 6543-9. Journal code: 0374755. ISSN: 0021-8561. Pub. country: United States. Language: English.

AB The allergens associated with cashew food allergy have not been well-characterized. We sought to identify the major allergens in cashew nut by performing IgE immunoblots to dissociated and reduced or nonreduced cashew protein extracts, followed by sequencing of the peptides of interest. Sera from 15 subjects with life-threatening reactions to cashews and 8 subjects who tolerate cashews but have life-threatening reactions to other tree nuts were compared. An aqueous cashew protein extract containing albumin/globulin was separated by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) and subjected to IgE immunoblotting using patient sera. Selected IgE reactive bands were subjected to N-terminal amino acid sequencing. Each of the 15 sera from cashew-allergic subjects showed IgE binding to the cashew protein extract. The dominant IgE-binding antigens in the reduced preparations included peptides in the 31-35 kD range, consistent with the large subunits of the major storage 13S globulin (legumin-like protein). Low-molecular-weight polypeptides of the 2S albumin family, with similarity to the major walnut allergen Jug r 1, also bound IgE. The sera from eight patients who tolerate cashew but displayed allergies to other tree nuts showed only minimal or no IgE binding to cashew. Cashew food allergy is associated with the presence of IgE directed against the major seed storage proteins in cashew, including the 13S globulin (legumin group) and 2S albumins, both of which represent major allergen classes in several plant seeds. Thus, the legumin-group proteins and 2S albumins are again identified as major food allergens, which will help further research into seed protein allergenicity.

L9 ANSWER 2 OF 11 MEDLINE on STN

2002361846. PubMed ID: 12109528. Extracts of *Anacardium occidentale* (cashew) pollen in patients with allergic bronchial asthma. Menezes E A; Tome E R; Nunes R N; Nunes A P; Freire C C F; Torres J C N; Castro F M; Croce J. (Department of Clinical Analyses, Faculty of Pharmacy, Universidade Federal do Ceara, Fortaleza, Brazil.. menezes@ufc.br) . Journal of investigational allergology & clinical immunology : official organ of the International Association of Asthmology (INTERASMA) and Sociedad Latinoamericana de Alergia e Inmunologia, (2002) Vol. 12, No. 1, pp. 25-8. Journal code: 9107858. ISSN: 1018-9068. Pub. country: Spain. Language: English.

AB Allergic reactions to the pollen of trees is among the most prevalent allergic sensitivities. The cashew tree grows in abundance in the northeast region of the Brazil, mainly in Fortaleza city, in state of the Ceara. It flowers once a year between August and October. This is the first study conducted to establish the possible role of the cashew pollen extract in causing skin test reactivity in patients with allergic asthma. A stock solution of pollen extract was prepared with the standard weight/volume method for intradermal skin tests and for the protein content of the extract, estimated with the use of Folin phenol reagent and a spectrophotometer. Ten nonallergic volunteers and 80 subjects with allergic asthma, as documented by previous positive skin test reactions to various pollens, were studied. All of the 80 patients

(100%) had positive test reactions (grade III and grade IV reactions). None of the control subjects (n = 10) had positive responses to the intradermal tests. This study provided us with knowledge of an additional pollen extract of the *Anacardium occidentale*, which could provoke skin test reactivities in asthmatic individuals from the northeastern area of Brazil. The results suggest a relationship between the period of flowering of the cashew tree and the increased number of allergic asthma cases.

L9 ANSWER 3 OF 11 MEDLINE on STN

2002038666. PubMed ID: 11766115. Botanical briefs: The cashew tree--*Anacardium occidentale* L. McGovern T W. (Fort Wayne Dermatology, IN 46825, USA.) *Cutis*; cutaneous medicine for the practitioner, (2001 Nov) Vol. 68, No. 5, pp. 321-2. Journal code: 0006440. ISSN: 0011-4162. Pub. country: United States. Language: English.

L9 ANSWER 4 OF 11 MEDLINE on STN

95155700. PubMed ID: 7852665. *Anacardium occidentale* (cashew) pollen allergy in patients with allergic bronchial asthma. Fernandes L; Mesquita A M. (Department of T.B. and Chest Diseases, Goa Medical College, Panaji, India.) *The Journal of allergy and clinical immunology*, (1995 Feb) Vol. 95, No. 2, pp. 501-4. Journal code: 1275002. ISSN: 0091-6749. Pub. country: United States. Language: English.

AB BACKGROUND: The cashew tree grows in abundance in the hills and plains of Goa, India. Because of the financial yield, more and more trees are being planted each year. The cashew tree flowers once a year between January and March, but pollination is mostly entomophilous. OBJECTIVE: For the first time, a study was conducted to establish the possible role of the cashew pollen in triggering allergic asthma. METHODS: A stock solution of pollen extract was prepared with the standard weight/volume method for intradermal skin tests and a bronchial provocation tests (BPTs). The protein content of the antigen, estimated with the use of Folin phenol reagent and a spectrophotometer, was 28.72 mg/ml. Ten healthy volunteers and 65 subjects with allergic asthma, as documented by previous positive skin test reactions to various pollens, were studied. RESULTS: Of the 65 patients, 26 (40%) had positive skin test reactions in various grades. BPTs were performed in 22 of the 26 patients after their baseline peak expiratory flow volume was assessed. Twenty (90.9%) patients had a positive BPT result, and the majority of patients had grade III and grade IV reactions. None of the control subjects (n = 10) had positive responses to either intradermal tests or the BPT. Serum IgE levels, estimated by ELISA, were high in patients with positive skin test responses and showed a linear correlation with cutaneous sensitivity. Control subjects showed normal levels of IgE (39.0 +/- 7.87 IU/ml). CONCLUSIONS: This study provided us with knowledge of an additional pollen, *Anacardium occidentale*, which could trigger an asthmatic response in allergic individuals.

L9 ANSWER 5 OF 11 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

2002:612926 Document No.: PREV200200612926. Characterization of the soluble allergenic proteins of cashew nut (*Anacardium occidentale* L.). Teuber, Suzanne S. [Reprint author]; Sathe, Shridhar K.; Peterson, W. Rich; Roux, Kenneth H.. Division of Rheumatology, Allergy and Clinical Immunology, University of California, Davis, School of Medicine, One Shields Avenue, TB 192, Davis, CA, 95616, USA. ssteuber@ucdavis.edu. *Journal of Agricultural and Food Chemistry*, (October 23, 2002) Vol. 50, No. 22, pp. 6543-6549. print. CODEN: JAFCAU. ISSN: 0021-8561. Language: English.

AB The allergens associated with cashew food allergy have not been well-characterized. We sought to identify the major allergens in cashew nut by performing IgE immunoblots to

dissociated and reduced or nonreduced cashew protein extracts, followed by sequencing of the peptides of interest. Sera from 15 subjects with life-threatening reactions to cashews and 8 subjects who tolerate cashews but have life-threatening reactions to other tree nuts were compared. An aqueous cashew protein extract containing albumin/globulin was separated by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) and subjected to IgE immunoblotting using patient sera. Selected IgE reactive bands were subjected to N-terminal amino acid sequencing. Each of the 15 sera from cashew-allergic subjects showed IgE binding to the cashew protein extract. The dominant IgE-binding antigens in the reduced preparations included peptides in the 31-35 kD range, consistent with the large subunits of the major storage 13S globulin (legumin-like protein). Low-molecular-weight polypeptides of the 2S albumin family, with similarity to the major walnut allergen Jug r 1, also bound IgE. The sera from eight patients who tolerate cashew but displayed allergies to other tree nuts showed only minimal or no IgE binding to cashew. Cashew food allergy is associated with the presence of IgE directed against the major seed storage proteins in cashew, including the 13S globulin (legumin group) and 2S albumins, both of which represent major allergen classes in several plant seeds. Thus, the legumin-group proteins and 2S albumins are again identified as major food allergens, which will help further research into seed protein allergenicity.

L9 ANSWER 6 OF 11 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN 1996:518616 Document No.: PREV199699240972. Contact dermatitis among cashew nut workers. Diogenes, Maria Jose Nogueira [Reprint author]; Morais, Selene Maia De; Carvalho, Fernando Ferreira [Reprint author]. Dep. de Medicina Clinica, Univ. Federal do Ceara, Fortaleza, Brazil. Contact Dermatitis, (1996) Vol. 35, No. 2, pp. 114-115. CODEN: CODEDG. ISSN: 0105-1873. Language: English.

L9 ANSWER 7 OF 11 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on STN 2002:875616 The Genuine Article (R) Number: 605GE. Characterization of the soluble allergenic proteins of cashew nut (Anacardium occidentale L.). Teuber S S (Reprint); Sathe S K; Peterson W R; Roux K H. Univ Calif Davis, Sch Med, Div Rheumatol Allergy & Clin Immunol, Dept Internal Med, 1 Shields Ave, TB 1192, Davis, CA 95616 USA (Reprint); Univ Calif Davis, Sch Med, Div Rheumatol Allergy & Clin Immunol, Dept Internal Med, Davis, CA 95616 USA; Florida State Univ, Dept Nutr Food & Exercise Sci, Tallahassee, FL 32306 USA; Florida State Univ, Dept Biol Sci, Tallahassee, FL 32306 USA. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY (23 OCT 2002) Vol. 50, No. 22, pp. 6543-6549. ISSN: 0021-8561. Publisher: AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON, DC 20036 USA. Language: English.

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The allergens associated with cashew food allergy have not been well-characterized. We sought to identify the major allergens in cashew nut by performing IgE immunoblots to dissociated and reduced or nonreduced cashew protein extracts, followed by sequencing of the peptides of interest. Sera from 15 subjects with life-threatening reactions to cashews and 8 subjects who tolerate cashews but have life-threatening reactions to other tree nuts were compared, An aqueous cashew protein extract containing albumin/globulin was separated by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) and subjected to IgE immunoblotting using patient sera. Selected IgE reactive bands were subjected to N-terminal amino acid sequencing. Each of the 15 sera from cashew-allergic subjects showed IgE binding to the cashew protein extract, The dominant IgE-binding antigens in the reduced

preparations included peptides in the 31-35 kD range, consistent with the large subunits of the major storage 13S globulin (legumin-like protein). Low-molecular-weight polypeptides of the 2S albumin family, with similarity to the major walnut allergen Jug r 1, also bound IgE. The sera from eight patients who tolerate cashew but displayed allergies to other tree nuts showed only minimal or no IgE binding to cashew. Cashew food allergy is associated with the presence of IgE directed against the major seed storage proteins in cashew, including the 13S globulin (legumin group) and 2S albumins, both of which represent major allergen classes in several plant seeds. Thus, the legumin-group proteins and 2S albumins are again identified as major food allergens, which will help further research into seed protein allergenicity.

L9 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN
 2002:737920 Document No. 137:384025 Characterization of the Soluble Allergenic Proteins of Cashew Nut (*Anacardium occidentale* L.). Teuber, Suzanne S.; Sathe, Shridhar K.; Peterson, W. Rich; Roux, Kenneth H. (Department of Internal Medicine School of Medicine, University of California, Davis, CA, 95616, USA). Journal of Agricultural and Food Chemistry, 50(22), 6543-6549 (English) 2002. CODEN: JAFCAU. ISSN: 0021-8561. Publisher: American Chemical Society.

AB The allergens associated with cashew food allergy have not been well-characterized. The authors sought to identify the major allergens in cashew nut by performing IgE immunoblots to dissociated and reduced or nonreduced cashew protein exts., followed by sequencing of the peptides of interest. Sera from 15 subjects with life-threatening reactions to cashews and 8 subjects who tolerate cashews but have life-threatening reactions to other tree nuts were compared. An aqueous cashew protein extract containing albumin/globulin was separated by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) and subjected to IgE immunoblotting using patient sera. Selected IgE reactive bands were subjected to N-terminal amino acid sequencing. Each of the 15 sera from cashew-allergic subjects showed IgE binding to the cashew protein extract. The dominant IgE-binding antigens in the reduced preps. included peptides in the 31-35 kD range, consistent with the large subunits of the major storage 13 S globulin (legumin-like protein). Low-mol.-weight polypeptides of the 2 S albumin family, with similarity to the major walnut allergen Jug r 1, also bound IgE. The sera from eight patients who tolerate cashew but displayed allergies to other tree nuts showed only minimal or no IgE binding to cashew. Cashew food allergy is associated with the presence of IgE directed against the major seed storage proteins in cashew, including the 13S globulin (legumin group) and 2S albumins, both of which represent major allergen classes in several plant seeds. Thus, the legumin-group proteins and 2S albumins are again identified as major food allergens, which will help further research into seed protein allergenicity.

L9 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN
 2002:621764 Document No. 138:88904 Ana o 1, a cashew (*Anacardium occidentale*) allergen of the vicilin seed storage protein family. Wang, Fang; Robotham, Jason M.; Teuber, Suzanne S.; Tawde, Pallavi; Sathe, Shridhar K.; Roux, Kenneth H. (Department of Biological Science, Florida State University, Tallahassee, FL, USA). Journal of Allergy and Clinical Immunology, 110(1), 160-166 (English) 2002. CODEN: JACIBY. ISSN: 0091-6749. Publisher: Mosby, Inc..

AB The authors initiated a study to clone cDNAs encoding cashew food allergens. A cashew cDNA library was screened

with human serum for IgE-reactive clones and rabbit IgG anti-cashew extract antisera. Reactive clones were sequenced and expressed, and linear epitopes were identified by means of solid-phase overlapping peptide anal. Immunoblot inhibition was used to identify the native peptide in cashew extract. Four closely related clones reactive with both human and rabbit antisera were sequenced. Sequence anal. showed that these encode members of the vicilin/sucrose-binding protein family of plant seed storage proteins. Screening of the recombinant protein with sera from 20 patients with cashew allergy and 8 cashew-tolerant patients with allergies to other tree nuts showed that 50% and 25% of sera from patients with cashew allergy and cashew-tolerant subjects, resp., bound the recombinant protein. The corresponding native allergen protein, designated Ana o 1, was located at approx. 50 kDa. Epitope mapping revealed 11 linear IgE-binding epitopes, of which 3 appear to be immunodominant. None of the epitopes were shared in common with those of the peanut vicilin allergen Ara h 1. Ana o 1, a vicilin-like protein, is a major food allergen in cashews. Cashew and peanut vicilins do not share linear epitopes.

L9 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

2001:700485 Document No. 136:231408 A sandwich enzyme-linked immunosorbent assay for the detection of almonds in foods. Hlywka, Jason J.; Hefle, Susan L.; Taylor, Steve L. (Food Allergy Research and Resource Program, Department of Food Science and Technology, University of Nebraska, Lincoln, NE, 68583-0955, USA). Journal of Food Protection, 63(2), 252-257 (English) 2000. CODEN: JFPRDR. ISSN: 0362-028X. Publisher: International Association for Food Protection.

AB An ELISA was developed to detect almonds as potential allergenic contaminants in food. Polyclonal antibodies directed against roasted almonds were partially purified from immunized sheep and rabbits and used as capture and secondary antibodies, resp., in a sandwich-type, 96-well plate format. Food samples and almond-spiked samples were extracted 1:10 in phosphate-buffered saline at 60°C for 2 h, centrifuged, and applied to wells coated with sheep anti-almond antibody. After incubation, washing, and the addition of rabbit anti-almond antibody, the amount of almond present was detected with the subsequent addition of goat anti-rabbit IgG-alkaline phosphatase conjugate and p-nitrophenyl phosphate substrate. Plate absorbances were read at 410 nm, and standard curves were developed in all matrixes to quantify unknowns. Antibodies developed were specific for almond; however, some cross-reactivity was observed with exts. of some tree nuts and sesame seeds. Sodium dodecyl sulfate-polyacrylamide gel electrophoresis and Western immunoblotting indicated that sheep anti-almond antibody recognized proteins extracted from black walnuts, Brazil nuts, cashews, hazelnuts, macadamia nuts, pistachios, and sesame seeds in addition to those from almond. The assay was optimized to detect less than 1 ppm of almond and was used successfully to determine almond residues in cereal and chocolate without cross-reacting interferences. A retail survey of 20 brands of cereal demonstrated that the assay produced statistically consistent results. This assay provides a useful quality control tool for the food industry for the protection of consumers allergic to almonds.

L9 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

1999:17722 Document No. 130:195892 Indirect Competitive ELISA for Determination of Traces of Peanut (*Arachis hypogaea* L.) Protein in Complex Food Matrixes. Holzhauser, Thomas; Vieths, Stefan (Department of Allergology, Paul-Ehrlich-Institut, Langen, D-63225, Germany). Journal of Agricultural and Food Chemistry, 47(2), 603-611 (English) 1999. CODEN: JAFCAU. ISSN: 0021-8561. Publisher: American Chemical Society.

AB An indirect competitive ELISA was developed allowing the detection of hidden peanut protein residues down to 2 ppm (micrograms/g) in various

foods. The high-titer, peanut-specific polyclonal antiserum used recognized potentially allergenic proteins in both native and roasted peanuts. In the absence of a food matrix, extractable protein from roasted peanuts was detected at $104 \pm 13\%$. From various food items, peanut protein at ≥ 13 ppm was recovered between 84 and 126%, and at 2 ppm of peanut protein recovery was $143 \pm 6\%$. Intra- and interassay precision was $<15\%$. In 5 of 17 com. food products without declaration of peanut components, between 2 and 18 ppm of peanut protein was detected. This is the 1st assay based on com. available reactants that allows the reliable determination of trace amts. of hidden peanut allergens in a variety of complex food matrixes.

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=> s "Ana-o-2"
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L10          20 "ANA-O-2"
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=> dup remove l10
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PROCESSING COMPLETED FOR L10
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L11          12 DUP REMOVE L10 (8 DUPLICATES REMOVED)
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=> s l11 and pd<20021104
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1 FILES SEARCHED...
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4 FILES SEARCHED...
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L12          0 L11 AND PD<20021104
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=> d l11 1-12 cbib abs
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L11 ANSWER 1 OF 12 MEDLINE on STN
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DUPLICATE 1
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2007235257. PubMed ID: 17368770. Homology modelling and conformational
analysis of IgE-binding epitopes of Ara h 3 and other legumin allergens
with a cupin fold from tree nuts. Barre Annick; Jacquet Geraldine; Sordet
Camille; Culerrier Raphael; Rouge Pierre. (Surfaces Cellulaires et
Signalisation chez les Vegetaux, UMR UPS-CNRS 5546, 24 Chemin de Borde
Rouge, 31326 Castanet Tolosan, France. ) Molecular immunology, (2007 May)
Vol. 44, No. 12, pp. 3243-55. Electronic Publication: 2007-03-21. Journal
code: 7905289. ISSN: 0161-5890. Pub. country: England: United Kingdom.
Language: English.
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AB Linear IgE-binding epitopes identified in legumin allergens of peanut (Ara
h 3) and other allergenic tree nuts (Jug r 4 of walnut, Cor a 9 of
hazelnut, Ana o 2 cashew nut) were mapped on
three-dimensional models of the proteins built up by homology modelling.
A conformational analysis revealed that consensual surface-exposed
IgE-binding epitopes exhibited some structural homology susceptible to
account for the IgE-binding cross-reactivity observed among peanut and
tree nut allergens. This structurally related cross-reactivity seems
irrespective of the botanical origin of the allergens and thus demands
that persons allergic to peanut avoid other three nuts to prevent possible
allergic reactions. IgE-binding epitopes similar to those found in 11S
globulin allergens do not apparently occur in other vicilin allergens with
the cupin fold from peanut (Ara h 1) or tree nuts (Jug r 2 of walnut, Cor
a 1 of hazel nut, Ana o 3 of cashew nut).
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L11 ANSWER 2 OF 12 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
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2008:129260 Document No.: PREV200800133945. Identification of pistachio
(Pistacia vera) allergens of 11s globulin and 2s albumin family. Ahn, K.
[Reprint Author]. Sungkyunkwan Univ, Samsung Med Ctr, Sch Med, Seoul,
South Korea. Journal of Allergy and Clinical Immunology, (JAN 2007) Vol.
119, No. 1, Suppl. 1, pp. S121.
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Meeting Info.: Annual Meeting of the American-Academy-of-Allergy-Asthma-
and-Immunology. San Diego, CA, USA. February 23 -27, 2007. Amer Acad
Allergy, Asthma & Immunol.
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CODEN: JACIBY. ISSN: 0091-6749. Language: English.
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L11 ANSWER 3 OF 12 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
2006:352527 Document No.: PREV200600357676. IgE-reactive proteins in cashew
apple juice concentrate are removed by filtration. Comstock, S. S.
[Reprint Author]; Kshirsagar, H.; Robotham, J. M.; Roux, K. H.; Sathe, S.
K.; Teuber, S. S.. Univ Calif Davis, Davis, CA USA. Journal of Allergy and
Clinical Immunology, (FEB 2006) Vol. 117, No. 2, Suppl. S, pp. S49.
Meeting Info.: 62nd Annual Meeting of the American-Academy-of-Allergy-
Asthma-and-Immunology. Miami Beach, FL, USA. March 03 -07, 2006. Amer Acad
Allergy Asthma & Immunol.
CODEN: JACIBY. ISSN: 0091-6749. Language: English.

L11 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
2006:855682 Epitope mapping of tree nut legumins. Robotham, Jason M.; Teuber,
Suzanne S.; Sathe, Shridhar K.; Roux, Kenneth H. (Department of Biological
Science, Florida State University, Tallahassee, FL, 32306, USA).
Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, United
States, Sept. 10-14, 2006, AGFD-035. American Chemical Society:
Washington, D. C. (English) 2006. CODEN: 69IHRD.

AB The 11S globulin proteins (legumins) from English walnut (Jug r 4),
hazelnut (Cor a 9), and cashew (Ana o 2) are
important food allergens. We have performed the linear IgE-epitope
mapping of Jug r 4 and Cor a 9 for homol. modeling and comparison with
cashew (Ana o 2), peanut (Ara h 3), and
soybean (G1 and G2 glycinin) allergenic epitopes. The alignment of the
primary sequences of the allergens reveals that one strong IgE-binding
epitope, common to both Jug r 4 and Cor a 9, shares considerable sequence
homol. with the other listed allergens. Two other allergenic "hot spots"
are shared between four of the six allergens. Homol. modeling of Jug r 4,
Cor a 9, Ana o 2, and Ara h 3 and surface
mapping of their epitopes identified the likely shared structural motifs
for IgE binding. These findings suggest a basis for cross-reactivity
among allergenic legumins.

L11 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
2006:855681 Effect of processing on allergen stability. Sathe, Shridhar K.;
Roux, Kenneth H. (Department of Nutrition, Food & Exercise Sciences,
Florida State University, Tallahassee, FL, 32306-1493, USA). Abstracts of
Papers, 232nd ACS National Meeting, San Francisco, CA, United States,
Sept. 10-14, 2006, AGFD-034. American Chemical Society: Washington, D. C.
(English) 2006. CODEN: 69IHRD.

AB Typically, food allergies are caused by food proteins. The linear
stretches of amino acids and discontinuous three dimensional features on
the protein recognized by patient IgE are known as the linear and
conformational epitopes, resp. Food proteins are often subjected to a
variety of processing methods. Depending on the stability of the allergen
and the severity of the processing treatment, epitope may be modified
potentially altering its immunoreactivity. Recent advances in our
understanding of immunoreactivity of almond, cashew, and walnut allergens
will be addressed. Stability of three major allergens in cashew nuts (Ana
o 1, Ana o 2, and Ana o 3) subjected to
various food processing methods will be used to illustrate the advantages
and limitations of food processing methods as tools to reduce
allergenicity.

L11 ANSWER 6 OF 12 MEDLINE on STN
2005293794. PubMed ID: 15940149. Diagnosing peanut allergy with skin prick
and specific IgE testing. Roberts Graham; Lack Gideon. (Paediatric
Allergy, Asthma and Immunology, Imperial College at St. Mary's, St. Mary's
Hospital, Praed Street, London W2 1NY, UK.) The Journal of allergy and
clinical immunology, (2005 Jun) Vol. 115, No. 6, pp. 1291-6. Journal
code: 1275002. ISSN: 0091-6749. Pub. country: United States. Language:

English.

AB BACKGROUND: Food allergy is common in childhood. It has been suggested that the magnitude of a skin prick test or specific IgE result can improve diagnostic usefulness, but this has been addressed in only a few tertiary challenge-based studies. OBJECTIVE: To determine the predictive value of a wheal $>$ or $=$ 8 mm or serum specific IgE $>$ or $=$ 15 kU A /L for clinical allergy and investigate whether results are generalizable. METHODS: All subjects, up to 16 years of age, who had been investigated with a peanut or tree nut food challenge were eligible for the study. Subjects were referred from either a tertiary allergy clinic or a community birth cohort. All subjects with a history suggestive of food allergy were offered a challenge unless there were features of anaphylaxis. Details of challenges were prospectively recorded. Results were modeled by using logistic regression. RESULTS: There was a total of 161 peanut challenges. Recent skin prick (longest wheal diameter) and specific IgE data were available for 135 and 136 challenges, respectively. The results suggest that a skin prick result $>$ or $=$ 8 mm and a specific IgE $>$ or $=$ 15 kU A /L have predictive values of 95% (95% CI, 76.2% to 99.9%) and 92.0% (74.0% to 99.0%), respectively, for a positive challenge. Age, the type of nut, and referral pattern of the subject did not appear to alter this relationship. CONCLUSION: These data suggest that a skin prick result $>$ or $=$ 8 mm or a specific IgE $>$ or $=$ 15 kU A /L have a high predictive value for clinical allergy to peanut and that these cutoff figures appear generalizable to different populations of children undergoing an assessment for peanut allergy.

L11 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

2004:413069 Document No. 140:422415 Protein and cDNA sequences of allergen Ana o 2 from cashew nuts (*Anacardium occidentale*) and their uses in diagnosis of cashew allergy. Roux, Kenneth H.; Teuber, Suzanne S.; Sathe, Shridhar K.; Robotham, Jason M. (Florida State University Research Foundation, USA; Regents of the University of California). PCT Int. Appl. WO 2004042026 A2 20040521, 42 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2003-US34960 20031104. PRIORITY: US 2002-423556P 20021104.

AB The invention describes the protein and cDNA sequences of allergen Ana o 2 from cashew nuts (*Anacardium occidentale*). A cashew cDNA library was screened with human IgE and rabbit IgG anti-cashew extract antisera, and a reactive non-vicilin clone was sequenced and expressed as a fusion protein in *E. coli*. Sequence anal. showed the selected clone, designated Ana o 2, to be a member of the legumin family (an 11S globulin) of seed storage proteins. By immunoblotting, 13 of 21 (62%) of sera from cashew allergic patients were reactive. Immunoblot inhibition data showed the native Ana o 2 constitutes a major band at -33 kD and a minor band at -55 kD. The invention addnl. provides an in vitro diagnostic test for detecting anti-cashew IgE in a patient.

L11 ANSWER 8 OF 12 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN

2004:209281 Document No.: PREV200400210131. Mutational analysis of the cashew vicilin allergen, Ana o 2. Tawde, P. D. [Reprint Author]. Biological Sciences, Florida State University, Tallahassee, FL, USA. Journal of Allergy and Clinical Immunology, (February 2004) Vol. 113, No. 2 Supplement, pp. S238. print. Meeting Info.: 60th Annual Meeting of the American Academy of Allergy,

Asthma and Immunology (AAAAI). San Francisco, CA, USA. March 19-23, 2004.
American Academy of Allergy, Asthma and Immunology.
CODEN: JACIBY. ISSN: 0091-6749. Language: English.

L11 ANSWER 9 OF 12 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
2004:177900 Document No.: PREV200400177301. Cross-reactivity of walnut,
cashew, and hazelnut legumin proteins in tree nut allergic patients.
Wallowitz, M. L. [Reprint Author]; Teuber, S. [Reprint Author]; Beyer, K.;
Sampson, H. A.; Roux, K. H.; Sathe, S. K.; Wang, F.; Robotham, J.. UC
Davis, Davis, CA, USA. Journal of Allergy and Clinical Immunology,
(February 2004) Vol. 113, No. 2 Supplement, pp. S156. print.
Meeting Info.: 60th Annual Meeting of the American Academy of Allergy,
Asthma and Immunology (AAAAI). San Francisco, CA, USA. March 19-23, 2004.
American Academy of Allergy, Asthma and Immunology.
CODEN: JACIBY. ISSN: 0091-6749. Language: English.

L11 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
2005:242487 Document No. 142:429119 Ana o 1 and Ana o
2, major cashew allergens of the vicilin and legumin families.
Roux, K. H.; Robotham, J. M.; Wang, F.; Teuber, S. S.; Sathe, S. K.
(Department of Biological Science and Institute of Molecular Biophysics,
University of California, Davis, CA, USA). Allergy Frontiers and Futures,
Proceedings of the Symposium of the Collegium Internationale
Allergologicum, 24th, Southampton, Bermuda, Nov. 1-7, 2002, Meeting Date
2002, 40-43. Editor(s): Bienenstock, John; Ring, Johannes; Togias, Alkis
G. Hogrefe & Huber Publishers: Cambridge, Mass. ISBN: 0-88937-279-9
(English) 2004. CODEN: 69GPMM.

AB The allergens responsible for cashew food allergy have not been
well-characterized. We have screened a cashew cDNA library with human IgE
and rabbit IgG anti-cashew extract antisera, and identified two recombinant
allergens. The genes encode members of the vicilin/sucrose binding and
legumin protein families of plant proteins. Screening of sera from
patients having experienced allergic reactions to cashews with the
recombinant fusion protein by immunoblotting showed 10 of 20 (50%) reacted
with the vicilin (designated Ana o 1) and 10 of 17 (59%) with the legumin
(Ana o 2). Inhibition of the reactions by
recombinant proteins show the corresponding native Ana o 1, to be
.apprx.50 kDa and Ana o 2 to be .apprx.33
kDa. Epitope mapping of Ana o 1 reveals 11 linear IgE-binding epitopes,
of which three appear to be immunodominant. For Ana o
2, 22 linear epitopes were identified with only two being
immunodominant. None of the cashew vicilin or legumin epitopes are shared
in common with those of the homologous peanut allergens, Ara h 1 or Ara h
3. In conclusion, both the vicilin-like protein and the legumin are major
allergens in cashew nuts.

L11 ANSWER 11 OF 12 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on
STN
2003:359691 Document No.: PREV200300359691. Ana o
2, a major cashew nut allergen of the legumin family. Robotham, J.
M. [Reprint Author]; Wang, F. [Reprint Author]; Teuber, S. S.; Sathe, S.
K.; Roux, K. H. [Reprint Author]. Biological Science, Florida State
University, Tallahassee, FL, USA. Journal of Allergy and Clinical
Immunology, (February 2003) Vol. 111, No. 2 Abstract Supplement, pp. S249.
print.
Meeting Info.: AAAAI 60th Anniversary Meeting. Denver, CO, USA. March
07-12, 2003. American Academy of Allergy, Asthma and Immunology.
CODEN: JACIBY. ISSN: 0091-6749. Language: English.

L11 ANSWER 12 OF 12 MEDLINE on STN DUPLICATE 2
2003477483. PubMed ID: 14555856. Ana o 2, a
major cashew (*Anacardium occidentale* L.) nut allergen of the legumin

family. Wang Fang; Robotham Jason M; Teuber Suzanne S; Sathe Shridhar K; Roux Kenneth H. (Department of Biological Science, Florida State University, Tallahassee, Fla., USA.) International archives of allergy and immunology, (2003 Sep) Vol. 132, No. 1, pp. 27-39. Journal code: 9211652. ISSN: 1018-2438. Pub. country: Switzerland. Language: English.

AB BACKGROUND: We recently cloned and described a vicilin and showed it to be a major cashew allergen. Additional IgE-reactive cashew peptides of the legumin group and 2S albumin families have also been reported. Here, we attempt to clone, express and characterize a second major cashew allergen. METHODS: A cashew cDNA library was screened with human IgE and rabbit IgG anti-cashew extract antisera, and a reactive nonvicilin clone was sequenced and expressed as a fusion protein in Escherichia coli. Immunoblotting was used to screen for reactivity with patients' sera, and inhibition of immunoblotting was used to identify the corresponding native peptides in cashew nut extract. The identified allergen was subjected to linear epitope mapping using SPOTs solid-phase synthetic peptide technology. RESULTS: Sequence analysis showed the selected clone, designated Ana o 2, to encode for a member of the legumin family (an 11S globulin) of seed storage proteins. By IgE immunoblotting, 13 of 21 sera (62%) from cashew-allergic patients were reactive. Immunoblot inhibition data showed that the native Ana o 2 constitutes a major band at approximately 33 kD and a minor band at approximately 53 kD. Probing of overlapping synthetic peptides with pooled human cashew-allergic sera identified 22 reactive peptides, 7 of which gave strong signals. Several Ana o 2 epitopes were shown to overlap those of the peanut legumin group allergen, Ara h 3, in position but with little sequence similarity. Greater positional overlap and identity was observed between Ana o 2 and soybean glycinin epitopes. CONCLUSIONS: We conclude that this legumin-like protein is a major allergen in cashew nut. Copyright 2003 S. Karger AG, Basel

=> s (roux k?/au or sathe s?/au or robotham j?/au or teuber s?/au)
L13 2299 (ROUX K?/AU OR SATHE S?/AU OR ROBOTHAM J?/AU OR TEUBER S?/AU)

=> s l13 and cashew nuts
L14 7 L13 AND CASHEW NUTS

=> dup remove l14
PROCESSING COMPLETED FOR L14
L15 5 DUP REMOVE L14 (2 DUPLICATES REMOVED)

=> d l15 1-5 cbib abs

L15 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN
2006:855681 Effect of processing on allergen stability. Sathe, Shridhar K.; Roux, Kenneth H. (Department of Nutrition, Food & Exercise Sciences, Florida State University, Tallahassee, FL, 32306-1493, USA). Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, United States, Sept. 10-14, 2006, AGFD-034. American Chemical Society: Washington, D. C. (English) 2006. CODEN: 69IHRD.

AB Typically, food allergies are caused by food proteins. The linear stretches of amino acids and discontinuous three dimensional features on the protein recognized by patient IgE are known as the linear and conformational epitopes, resp. Food proteins are often subjected to a variety of processing methods. Depending on the stability of the allergen and the severity of the processing treatment, epitope may be modified potentially altering its immunoreactivity. Recent advances in our understanding of immunoreactivity of almond, cashew, and walnut allergens will be addressed. Stability of three major allergens in cashew nuts (Ana o 1, Ana o 2, and Ana o 3) subjected to various food

processing methods will be used to illustrate the advantages and limitations of food processing methods as tools to reduce allergenicity.

L15 ANSWER 2 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN 2006:121670 Document No.: PREV200600122265. Purified linear epitopes from cashew nuts, nucleic acids encoding therefor, and associated methods. Roux, Kenneth H. [Inventor]; Sathe, Shridhar K. [Inventor]; Teuber, Suzanne S. [Inventor]. Tallahassee, FL USA. Patent Info.: US 06884877 20050426. Official Gazette of the United States Patent and Trademark Office Patents, (APR 26 2005) CODEN: OGUPE7. ISSN: 0098-1133. Language: English.

AB Disclosed are major allergenic proteins in cashew nut, which are legumin-like proteins and 2S albumins. Also disclosed is a polypeptide allergen in the 7S superfamily, which includes vicilin-like and sucrose binding proteins. Several linear epitopes of the cashew nut are identified and characterized. The invention further discloses the sequence of cDNA encoding the allergenic polypeptide, the allergen being designated Ana o 1, and also describes the characterization of the expressed recombinant polypeptide and associated methods employing the polypeptide.

L15 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN 2004:413069 Document No. 140:422415 Protein and cDNA sequences of allergen Ana o 2 from cashew nuts (*Anacardium occidentale*) and their uses in diagnosis of cashew allergy. Roux, Kenneth H.; Teuber, Suzanne S.; Sathe, Shridhar K.; Robotham, Jason M. (Florida State University Research Foundation, USA; Regents of the University of California). PCT Int. Appl. WO 2004042026 A2 20040521, 42 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2003-US34960 20031104. PRIORITY: US 2002-423556P 20021104.

AB The invention describes the protein and cDNA sequences of allergen Ana o 2 from cashew nuts (*Anacardium occidentale*). A cashew cDNA library was screened with human IgE and rabbit IgG anti-cashew extract antisera, and a reactive non-vicilin clone was sequenced and expressed as a fusion protein in *E. coli*. Sequence anal. showed the selected clone, designated Ana o 2, to be a member of the legumin family (an 11S globulin) of seed storage proteins. By immunoblotting, 13 of 21 (62%) of sera from cashew allergic patients were reactive. Immunoblot inhibition data showed the native Ana o 2 constitutes a major band at-33 kD and a minor band at -55 kD. The invention addnl. provides an in vitro diagnostic test for detecting anti-cashew IgE in a patient.

L15 ANSWER 4 OF 5 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN DUPLICATE 1

2004:382843 Document No.: PREV200400384703. Impact of gamma-irradiation and thermal processing on the antigenicity of almond, cashew nut and walnut proteins. Su, Mengna; Venkatachalam, Mahesh; Teuber, Suzanne S.; Roux, Kenneth H.; Sathe, Shridhar K. [Reprint Author]. Dept Nutr Food and Exercise Sci, Florida State Univ, Tallahassee, FL, 32306, USA. ssathe@mailier.fsu.edu. Journal of the Science of Food and Agriculture, (August 15 2004) Vol. 84, No. 10, pp. 1119-1125. print. ISSN: 0022-5142 (ISSN print). Language: English.

AB Whole unprocessed almonds, cashew nuts and walnuts were each subjected to gamma-irradiation (1, 5, 10 and 25 kGy) followed by

heat processing including autoclaving (121degreeC, 15 psi for 15 and 30 min), dry roasting (138 and 160degreeC for 30 min each, 168 and 177degreeC for 12 min each), blanching (100degreeC for 5 and 10 min), oil roasting (191degreeC, 1 min) and microwave heating (500 W for 1 and 3 min). Rabbit polyclonal antibodies were raised against each major protein isolated from defatted, but not subjected to gamma-irradiation and/or any thermal processing, almond, cashew nut and walnut flours. Immunoreactivity of almond, cashew nut and walnut proteins soluble in borate saline buffer, normalised to 1 mg protein ml⁻¹ for all samples, was determined by inhibition enzyme-linked immunosorbent assay (ELISA) and Western blotting. ELISAs and Western blotting experiments indicated that almond, cashew nut and walnut proteins exposed to gamma-irradiation alone or followed by various thermal treatments remained antigenically stable. Copyright 2004 Society of Chemical Industry.

L15 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN

2005:242487 Document No. 142:429119 Ana o 1 and Ana o 2, major cashew allergens of the vicilin and legumin families. Roux, K. H.; Robotham, J. M.; Wang, F.; Teuber, S. S.; Sathe, S. K. (Department of Biological Science and Institute of Molecular Biophysics, University of California, Davis, CA, USA). Allergy Frontiers and Futures, Proceedings of the Symposium of the Collegium Internationale Allergologicum, 24th, Southampton, Bermuda, Nov. 1-7, 2002, Meeting Date 2002, 40-43. Editor(s): Bienenstock, John; Ring, Johannes; Togias, Alkis G. Hogrefe & Huber Publishers: Cambridge, Mass. ISBN: 0-88937-279-9 (English) 2004. CODEN: 69GPMM.

AB The allergens responsible for cashew food allergy have not been well-characterized. We have screened a cashew cDNA library with human IgE and rabbit IgG anti-cashew extract antisera, and identified two recombinant allergens. The genes encode members of the vicilin/sucrose binding and legumin protein families of plant proteins. Screening of sera from patients having experienced allergic reactions to cashews with the recombinant fusion protein by immunoblotting showed 10 of 20 (50%) reacted with the vicilin (designated Ana o 1) and 10 of 17 (59%) with the legumin (Ana o 2). Inhibition of the reactions by recombinant proteins show the corresponding native Ana o 1, to be .apprx.50 kDa and Ana o 2 to be .apprx.33 kDa. Epitope mapping of Ana o 1 reveals 11 linear IgE-binding epitopes, of which three appear to be immunodominant. For Ana o 2, 22 linear epitopes were identified with only two being immunodominant. None of the cashew vicilin or legumin epitopes are shared in common with those of the homologous peanut allergens, Ara h 1 or Ara h 3. In conclusion, both the vicilin-like protein and the legumin are major allergens in cashew nuts.

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---Logging off of STN---

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Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	123.85	124.06
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL

CA SUBSCRIBER PRICE	ENTRY	SESSION
	-8.80	-8.80

STN INTERNATIONAL LOGOFF AT 10:26:50 ON 04 MAR 2008